

Abstract

Title: A case report of physiotherapeutic care of a patient after double osteosynthesis of the humerus with postoperative paresis of the nerve radialis

Objectives: The aim of this thesis is the theoretical elaboration of knowledge concerning peripheral paresis with emphasis on the radial nerve, osteosynthesis of the humerus and the rehabilitation process. In a special part, the aim is to elaborate a case study of physiotherapeutic care, which focuses on postoperative paresis of the n. radialis after double osteosynthesis of the humerus, using both theoretical and practical knowledge from the bachelor's study.

Methods: The thesis has two parts. In the theoretical part I have elaborated data on the shoulder joint, fractures, osteosynthesis of the humerus, peripheral nerves, paresis of the n. radialis and possibilities of rehabilitation in this diagnosis with the help of specialized sources. A special section is devoted to a complete case report of a patient with the given diagnosis. It includes patient's history, initial kinesiological analysis, 10 therapeutic units, output kinesiological examination and evaluation of the effect of therapy.

Results: This thesis was prepared during the bachelor internship at Centrum léčby pohybového aparátu in Prague in January 2024. The therapies resulted in an increase in range at the shoulder and elbow joints, an increase in muscle strength at these joints, an increase in muscle strength of the paretic extensor group of the right upper limb, an improvement in breathing stereotype, an improvement in surface sensation in the C7 segment, the removal of blockages in which limitations in joint play were previously found, and an improvement in fascia mobility whose extensibility was previously limited.

Keywords: Peripheral paresis, n. radialis, osteosynthesis, humerus, physiotherapy, case report, brachial plexus